



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,319	03/29/2002	Wilhelm Aures	449122026300	7284

7590 04/12/2007  
MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 300  
McLEAN, VA 22102

EXAMINER
----------

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
----------	--------------

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

sf

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/089,319	AURES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gregory B. Sefcheck	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

- Applicant's Request for Continued Examination filed 1/25/2007 is acknowledged.
- Claims 1 and 12 have been amended.
- Claims 1-17 remain pending.

### ***Claim Objections***

1. Claims 5 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The present amendments to claim 1 (and 12) introduce the limitations of claim 5 (and 16) into claim 1 (and 12), from which claim 5 (and 16) is dependent. As such, the limitations of claim 5 (and 16) do not further limit claim 1 (and 12) upon entry of the amendments.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ertz et al. (US005323444A), hereafter Ertz, in view of Shionozaki (US006038214A).

- Regarding Claims 1 and 5,

Ertz teaches a method for controlling instances of access to transmission resources of a communications network for transferring information items (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on its call capacity before the call is routed, comprising checking an event of an instance of access to the communications network to determine if the amount of transmission resources required for the information transfer is currently available in the communications network (Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer (Fig. 19(a), col. 10 lines 45-67, claim 38 lines 1-28, Fig. 20) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and an emergency call to a PSAP being a preferred priority with alternate routing applied Step 109 in the event PSAP is at capacity, and allocating the transmission resources required for the information transfer made in the communications network in the event of a high priority of the instance of access (Fig. 62, col. 103 lines 17-67, col. 104 lines 1-16) referenced by the determination the PSAP is at Call Capacity and Routing Fails step 12 and Get Alternative step 13 is performed.

Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources

from low priority sessions to meet the demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This would maximize the available resources of a network while accommodating the highest priority sessions.

- Regarding Claim 2,

Ertz teaches wherein the transmission resources made available are allocated for the information transfer (Fig. 19(a), col. 10 lines 45-67) referenced by the Route Call step 23 followed by Routing is Successful step 24 wherein the transmission resources for the call is allocated.

- Regarding Claim 3,

Ertz teaches further comprising determining at least one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access (Fig. 10, Fig. 19(a), col. 10 lines 45-67) referenced by the incoming call processed through a check destination facility 630 wherein the ANI is used to determine a priority call from the Emergency Service Number table step 3, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred (Fig. 19(a), col. 10 lines 45-67, Fig. 20) referenced by the ANI being an emergency type of information from the ESN table search of step 3 to

determine an available PSAP, and the priority of the allocated transmission resources by the type of information items transferred (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101.

- Regarding Claim 4,

Ertz teaches wherein instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority (col. 3 lines 63-66, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Check Destination 100 for preferred priority calls to Public Safety Access Point 103 which is an emergency call center for E9-1-1 calls, the information items to be transferred to the emergency call center being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP.

- Regarding Claim 6,

Ertz teaches wherein the required transmission resources are determined and made available randomly (Fig. 63, col. 105 lines 19-26) referenced by the acceptance by the PSAP of another call step 17 without limitation on a particular trunk line.

Art Unit: 2616

- Regarding Claim 7,

Ertz teaches wherein the transmission resources made available are allocated to the instances of access having a high priority (Fig. 1, col. 8 lines 30-66, claim 38 lines 6) referenced by the subscriber being an Emergency Service Requestor initiates an E9-1-1 call 201 which are preferred priority calls checked against an Emergency Service Number table 213 for routing to a PSAP, for the information transfer the allocated transmission resources being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP routed to an available PSAP destination step 103.

- Regarding Claim 8,

Ertz teaches wherein the transmission resources are arranged between switching devices arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 and the Call Routing Switch 218 of Platform 204, and/or between a switching device of the communications network and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claims 9 and 10,

Ertz does not explicitly disclose forming and storing an identifier for the

corresponding front-end device in the switching device when the transmission resources required are available, where the identifier indicates a reduced amount of resources for the transmission of information items having a low priority. Ertz also does not explicitly disclose erasing or resetting the identifier upon expiration of a prescribed time interval in which the reduced amount of resources allocated for information items having a low priority is not exceeded.

Shionozaki discloses that the states (identifier) of sessions having resources allocated to it are stored and then changed to reflect a preemption or change of low priority sessions to accommodate higher priority sessions. Shionozaki further shows that the states are returned to their original states after a predetermined time has elapsed (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by storing the states of resource-allocated sessions, updating those states to reflect a reduction in resource allocation for preempted/changed low priority sessions to accommodate higher priority sessions and resetting the states after a predetermined time has elapsed, as shown by Shionozaki. This would maximize the available resources of a network in accommodating the highest priority sessions while enabling the network to keep track of which low priority sessions have surrendered resources to higher priority sessions such that the resources could be re-allocated back to the low priority session after the higher priority session is completed.



- Regarding Claim 11,

Ertz teaches wherein the transmission resources are implemented by a prescribed number of trunks or by a prescribed number of time-division-multiplexoriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the incoming Emergency Service trunk 206 from the Public Telephone Network 219 which are inherently time division multiplexed.

- Regarding Claim 12 and 16,

Ertz teaches a communications system for controlling instances of access to transmission resources of a communications network (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on it's call capacity before the call is routed, comprising at least one switching device arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Platform 204 with Call Routing Switch 218, transmission resources assigned to the at least one switching device and allocated for transmitting information items (Fig. 1, col. 8 lines 30-43) referenced by the incoming/outgoing trunks 206 of the Call. Routing Switch 218, and a device provided in the event of an instance of access to the transmission resources to check the current availability of the transmission resources required for the information transfer (Fig.1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the Application Processor 234 determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, a determining device to determine the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer are arranged in the at least one switching

Art Unit: 2616

device (Fig. 1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30, Fig. 20) referenced by the preferred priority of calls to PSAP and the Platform 204 determination if the PSAP is at call capacity and cannot accept any more calls step 18 through the associated trunks of the call routing switch 218 resulting in Use Alternate Routing Step 109, and the event of a determined high priority of the instance of access are provided in the at least one switching device and the transmission resources required for the information transfer are made available (Fig. 19(a), col. 10 lines 45-67, col. 11 lines 1-15, claim 38 lines 1-28) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and Get Alternative step 13 if the PSAP is at capacity to obtain alternate transmission resources with the emergency call to a PSAP being a preferred priority.

Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources from low priority sessions to meet the demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This would maximize the available resources of a network while accommodating the highest priority sessions.

Art Unit: 2616

- Regarding Claim 13,

Ertz teaches wherein the device for rendering available the required transmission resources is configured such that the transmission resources made available are allocated to the instance of access for the information transfer (Fig. 1, Fig. 63, col. 105 lines 19-26) referenced by the Platform 204 determination that the destination PSAP is not at capacity and can accept another call step 17 wherein the call is routed to the PSAP.

- Regarding Claim 14,

Ertz teaches wherein the allocated transmission resources assigned to the at least one switching device are arranged between at least one of the at least one switching device and at least one further switching device (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 which inherently is composed of telephone switching devices and the Call Routing Switch 218 of Platform 204, and are arranged between the at least one switching device and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claim 15,

Ertz teaches wherein the determining device to determine the priority of the instance of access are configured such that the priority is determined with at least one of

destination information items transferred in the course of the current instance of access (Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101 wherein the preferred priority call is based on emergency 9-1-1 digits of the current call and the ANI identifier, and with information items transferred in the course of the current instance of access and representing the type of the information items to be transferred (col. 10 lines 45-61) referenced by the emergency 9-1-1 digits and the ANI of the current call representing a preferred priority, the priority of the allocated transmission resources being determined during the information transfer by the type of transferred information items (Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101 wherein the preferred priority call is based on emergency 9-1-1 digits of the current call and the ANI identifier.

- Regarding Claim 17,

Ertz teaches wherein the transmission resources assigned to the switching device are implemented by trunks outgoing from the at least one switching device or by outgoing time-division-multiplex-oriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the Emergency Service trunk 206 to/from the Call Routing Switch 218 from the Public Telephone Network 219 and the outgoing trunks to the Public Telephone Network 219 for termination to the PSAP all of which are inherently time

division multiplexed lines.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Combs et al. (US006665701B1)
- Gerszberg et al. (US006452923B1)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GBS *GBS*  
4-3-2007

*Seema S. Rao*  
SEEMA S. RAO 411107  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2300